



National
Library
of Medicine


PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	OMIM	Books
Search PubMed	<input type="text"/> for <input type="button" value="Go"/> <input type="button" value="Clear"/>							
<input checked="" type="checkbox"/> Limits <input type="button" value="Preview/Index"/> <input type="button" value="History"/> <input type="button" value="Clipboard"/> <input type="button" value="Details"/>								
<input type="button" value="Display"/> <input type="button" value="Abstract"/> <input type="button" value="Sort"/> Show: 20 <input type="button" value="Send to"/> <input type="button" value="Text"/>								

Entrez
PubMed

1: Gene 1988 Jun 15;66(1):11-7

Related Articles, Links

PubMed
Services

Alkaline phosphatase as a reporter enzyme.

Yoon K, Thiede MA, Rodan GA.

Department of Bone Biology and Osteoporosis Research, Merck Sharp & Dohme Research Laboratories, West Point, PA 19486.

Related
Resources

This study examines the use of alkaline phosphatase (AP) as a reporter enzyme. We constructed a plasmid containing the cDNA which encodes the bone/liver/kidney rat AP under the control of the simian virus 40 (SV40) early promoter and used it to transfect Chinese hamster ovary, SV40-transformed African Green Monkey kidney 7, and rat osteosarcoma 25/1 mammalian cells. AP activity in these cells, measured three days later, was 40-400-fold above background. When AP and chloramphenicol acetyltransferase (CAT) plasmids were cotransfected, the detection of AP activity by a simple spectrophotometric assay was at least as sensitive as the detection of CAT activity using a radioactive substrate. Moreover, since mammalian AP is a membrane-bound ectoenzyme, transfected cells can be visualized by histochemical staining. This approach was used to estimate transfection efficiency. The convenient methods for AP detection should make it a useful reporter enzyme.

PMID: 3166444 [PubMed - indexed for MEDLINE]

Display	Abstract	Show: 20	Sort	Send to	Text
---------	----------	----------	------	---------	------

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)
[Freedom of Information Act](#) | [Disclaimer](#)